HALO-HC**M Active Technical Specifications

High-Speed HDMI® Active Copper Cable
Rev. 220117

The HALO-HC**M Active series is lengths 10 meters through 30 meters. This series utilizes active circuitry in the Display side connector head to equalize and boost HDMI signals with video resolutions up to 4K@60Hz (18.0Gbps) up to 20 meters and resolutions up to 4K@30Hz (10.2Gbps) up to 30 meters. As such this cable is directional and must be oriented correctly at install.

The HALO-HC Active series is designed to obtain the smallest diameter applicable for the signal and retain the bandwidth. The overall cable is dual shielded with a full coverage foil shield and an 65% coverage dual weave braid shield. Unlike many cables on the market, the connectors feature full shielding over the solder joints instead of drain wire under a pre-mold. These cables are fully shielded from connector shroud to connector shroud. All contact surfaces are gold plated for conductivity, durability, and resistance to tarnish.
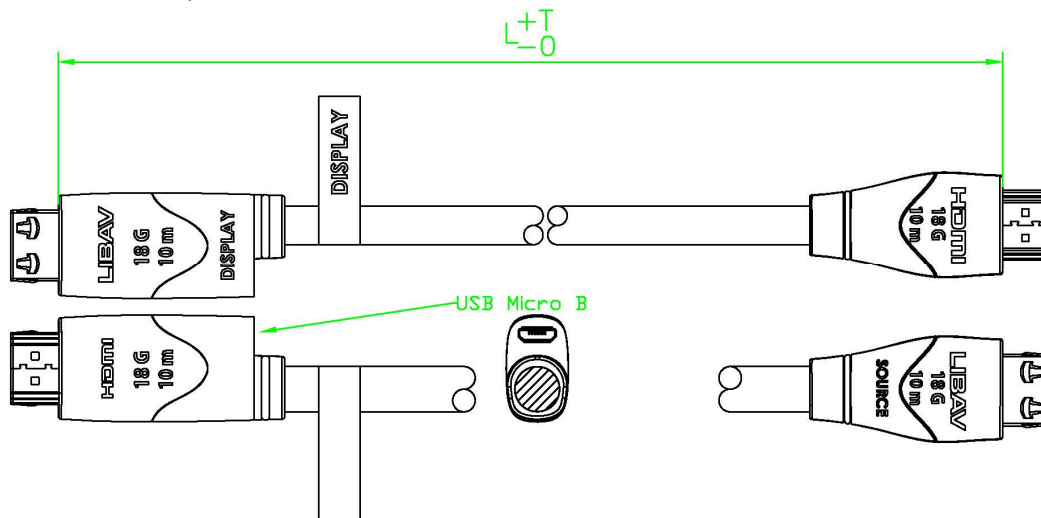
Liberty's new Space themed lines offer new features carried across the lines. The HALO series offer Liberty's High Retention L-Grip feature for retention 3 times the normal standard. The heads are printed with the cable bandwidth and the cable length for ease of identification. The HALO series offer the Orbit ID rings in each package so an installer can color code the connectivity. The Active cables are noted 3 times for direction to prevent backwards installations.

Key Features:

- 4K60 4:4:4 18Gbps Bandwidth to 20 meters. 10.2Gbps to 30 meters
- Active signal equalization
- Directional and clearly marked
- CL2 and FT4 for in-wall use
- High Retention HDMI plugs
- USB Micro B Power Port Option
- Oxygen Free Copper
- Solid Core Conductors
- Orbit ID Rings

Key Applications:

- HDMI Extension and Routing
- Digital Signage
- Projector HDMI feed
- Boardroom, Collaboration
- Education
- Home Theater

Note: The HALO series offers multiple AWG sizes depending on length and bandwidth. A separate Technical Specification table and part number listing is listed in the following pages based on the differing cable sizes. The pages are set up as stand-alone for ease of extract.

HALO-HC10M to HALO-HC12M

Technical Specifications – 10m lengths 28 AWG	
I/O Connections	
HDMI	Male HDMI Type A connector with L-Grip and Gold-Plated Shroud and contacts
Supported Audio and Video	
Maximum Video Compatibility	HDMI 2.0b 4K@60Hz 4:4:4 Chroma (2160p) 1080p 3D, 21:9 (True cinema), Multi stream video and audio, deep color x.v.Color™
Video Compliance	HDMI 2.0, HDCP 2.3, HDR
Embedded Audio	All HDMI supported Audio Formats
HEAC Support	No, does not support Ethernet or eARC
CEC Support	Yes
Maximum Bandwidth	18.0 Gbps
Cable Construction	
HDMI Hood Material	Molded two-tone Blue and Black PVC
HDMI Hood Dimensions Source Side	35.0mm x 20.6mm x 11.4mm	1.38 x 0.81 x 0.45 inch
HDMI Hood Dimensions Display Side	38.0mm x 20.6mm x 11.5mm	1.50 x 0.81 x 0.45 in w/6.0mm	0.24 in Strain Relief
Jacket Material	Lead Free Polyvinyl Chloride (PVC)
Cable Construction	Solid Core Oxygen Free Copper: 28AWG/5PSH+28AWG/4C
Overall Cable Diameter	7.3 mm	0.287 inch
Minimum Bend Radius	Unloaded: 73 mm	2.87in, Loaded: 146mm	5.74in
Shielding	100% Aluminum Foil + 65% AL-MG Dual Braid shield
Maximum Tensile Load	20 kg	44 lbs
Environmental Requirements	
Operating Temperature	0° to 75° C (+32° to +140° F)
Operating Humidity	20% to 85%, Non-condensing
Storage Temperature	-30° to 75° C (-22° to +122° F)
Storage Humidity	20% to 85%, Non-condensing
Power and Regulatory	
Power	HDMI BUS power from pin 18 of sink (Display) or 5V 0.5A USB via Micro B port
Regulatory	NEC® rated CL2, CEC rated CMG FT4, RoHS Compliant, REACH Compliant, CE
CA Prop 65 Warning	https://secure.libertycable.com/california-proposition-65
Other	
Warranty	Limited Lifetime Warranty
TAA	TAA Compliant – Made in Taiwan
Package	Re-sealable Retail bag
Orbit ID Rings	Rubber: 9 colors: White,Green,Red,Blue,Teal,Pink,Purple,Yellow,Orange

Part Number listing for HALO 28 AWG Active Cables

Part Numbers	Part Description	Cable Length
HALO-HC10M	HALO 18G HDMI CBL CL2 BLK 10M	10 meters / 33 feet
HALO-HC12M	HALO 18G HDMI CBL CL2 BLK 12M	12 meters / 40 feet

Caution: Heavier AWG HDMI cables should be supported and not permitted to hang when plugged into an HDMI port on a device. The unsupported weight of the cable or a sudden force applied to the cable can cause the shroud of the connector to flex and give way. This is intentionally designed for safety and to protect the device ports from damage. It is not a warranty issue.

HALO-HC15M to HALO-HC20M

Technical Specifications – 15 and 20m lengths 24 AWG	
I/O Connections	
HDMI	Male HDMI Type A connector with L-Grip and Gold-Plated Shroud and contacts
Supported Audio and Video	
Maximum Video Compatibility	HDMI 2.0b 4K@60Hz 4:4:4 Chroma (2160p) 1080p 3D, 21:9 (True cinema), Multi stream video and audio, deep color x.v.Color™
Video Compliance	HDMI 2.0, HDCP 2.3, HDR
Embedded Audio	All HDMI supported Audio Formats
HEAC Support	No, does not support Ethernet or eARC
CEC Support	Yes
Maximum Bandwidth	18.0 Gbps
Cable Construction	
HDMI Hood Material	Molded two-tone Blue and Black PVC
HDMI Hood Dimensions Source Side	35.0mm x 20.5mm x 11.0mm | 1.38 x 0.81 x 0.43 inch
HDMI Hood Dimensions Display Side	38.0mm x 20.6mm x 11.5mm | 1.50 x 0.81 x 0.45 in w/6.0mm | 0.24 in Strain Relief
Jacket Material	Lead Free Polyvinyl Chloride (PVC)
Cable Construction	Solid Core Oxygen Free Copper: 24AWG/5PSH+24AWG/4C
Overall Cable Diameter	9.0 mm | 0.354 inch
Minimum Bend Radius	Unloaded: 90 mm | 3.55in, Loaded: 180mm | 7.10in
Shielding	100% Aluminum Foil + 65% AL-MG Dual Braid shield
Maximum Tensile Load	20 kg | 44 lbs
Environmental Requirements	
Operating Temperature	0° to 75° C (+32° to +140° F)
Operating Humidity	20% to 85%, Non-condensing
Storage Temperature	-30° to 75° C (-22° to +122° F)
Storage Humidity	20% to 85%, Non-condensing
Power and Regulatory	
Power	HDMI BUS power from pin 18 of sink (Display) or 5V 0.5A USB via Micro B port
Regulatory	NEC® rated CL2, CEC rated CMG FT4, RoHS Compliant, REACH Compliant, CE
CA Prop 65 Warning	https://secure.libertycable.com/california-proposition-65
Other	
Warranty	Limited Lifetime Warranty
TAA	TAA Compliant – Made in Taiwan
Package	Re-sealable Retail bag
Orbit ID Rings	Rubber: 9 colors: White,Green,Red,Blue,Teal,Pink,Purple,Yellow,Orange

Part Number listing for HALO 24 AWG 18Gbps Active Cables

Part Numbers	Part Description	Cable Length
HALO-HC15M	HALO 18G HDMI CBL CL2 BLK 15M	15 meters / 50 feet
HALO-HC20M	HALO 18G HDMI CBL CL2 BLK 20M	20 meters / 66 feet

Caution: Heavier AWG HDMI cables should be supported and not permitted to hang when plugged into an HDMI port on a device. The unsupported weight of the cable or a sudden force applied to the cable can cause the shroud of the connector to flex and give way. This is intentionally designed for safety and to protect the device ports from damage. It is not a warranty issue.

HALO-HC23M to HALO-HC30M

Technical Specifications – 23 and 30m lengths 24 AWG	
I/O Connections	
HDMI	Male HDMI Type A connector with L-Grip and Gold-Plated Shroud and contacts
Supported Audio and Video	
Maximum Video Compatibility	HDMI 2.0b 4K@30Hz 4:4:4 Chroma and 4K60Hz 4:2:0 Chroma
Video Compliance	HDMI 2.0, HDCP 2.3, HDR
Embedded Audio	All HDMI supported Audio Formats
HEAC Support	No, does not support Ethernet or eARC
CEC Support	No
Maximum Bandwidth	10.2 Gbps
Cable Construction	
HDMI Hood Material	Molded two-tone Blue and Black PVC
HDMI Hood Dimensions Source Side	35.0mm x 20.5mm x 11.0mm | 1.38 x 0.81 x 0.43 inch
HDMI Hood Dimensions Display Side	38.0mm x 20.6mm x 11.5mm | 1.50 x 0.81 x 0.45 in w/6.0mm | 0.24 in Strain Relief
Jacket Material	Lead Free Polyvinyl Chloride (PVC)
Cable Construction	Solid Core Oxygen Free Copper: 24AWG/5PSH+24AWG/4C
Overall Cable Diameter	9.0 mm | 0.354 inch
Minimum Bend Radius	Unloaded: 90 mm | 3.55in, Loaded: 180mm | 7.10in
Shielding	100% Aluminum Foil + 65% AL-MG Dual Braid shield
Maximum Tensile Load	20 kg | 44 lbs
Environmental Requirements	
Operating Temperature	0° to 75° C (+32° to +140° F)
Operating Humidity	20% to 85%, Non-condensing
Storage Temperature	-30° to 75° C (-22° to +122° F)
Storage Humidity	20% to 85%, Non-condensing
Power and Regulatory	
Power	HDMI BUS power from pin 18 of sink (Display) or 5V 0.5A USB via Micro B port
Regulatory	NEC® rated CL2, CEC rated CMG FT4, RoHS Compliant, REACH Compliant, CE
CA Prop 65 Warning	https://secure.libertycable.com/california-proposition-65
Other	
Warranty	Limited Lifetime Warranty
TAA	TAA Compliant – Made in Taiwan
Package	Re-sealable Retail bag
Orbit ID Rings	Rubber: 9 colors: White,Green,Red,Blue,Teal,Pink,Purple,Yellow,Orange

Part Number listing for HALO 24 AWG 10.2Gbps Active Cables

Part Numbers	Part Description	Cable Length
HALO-HC23M	HALO 10G HDMI CBL CL2 BLK 23M	23 meters / 75 feet
HALO-HC30M	HALO 10G HDMI CBL CL2 BLK 30M	30 meters / 98 feet

Caution: Heavier AWG HDMI cables should be supported and not permitted to hang when plugged into an HDMI port on a device. The unsupported weight of the cable or a sudden force applied to the cable can cause the shroud of the connector to flex and give way. This is intentionally designed for safety and to protect the device ports from damage. It is not a warranty issue.

Liberty Wire & Cable specifications are subject to change without notice. Contact an account representative for current product specifications. Liberty Wire & Cable continuously strives to ensure product specifications are accurate and complete. All physical specifications are nominal.

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